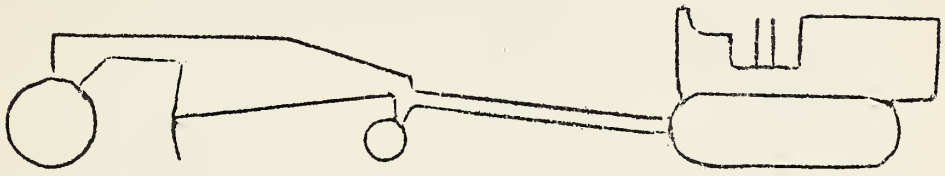
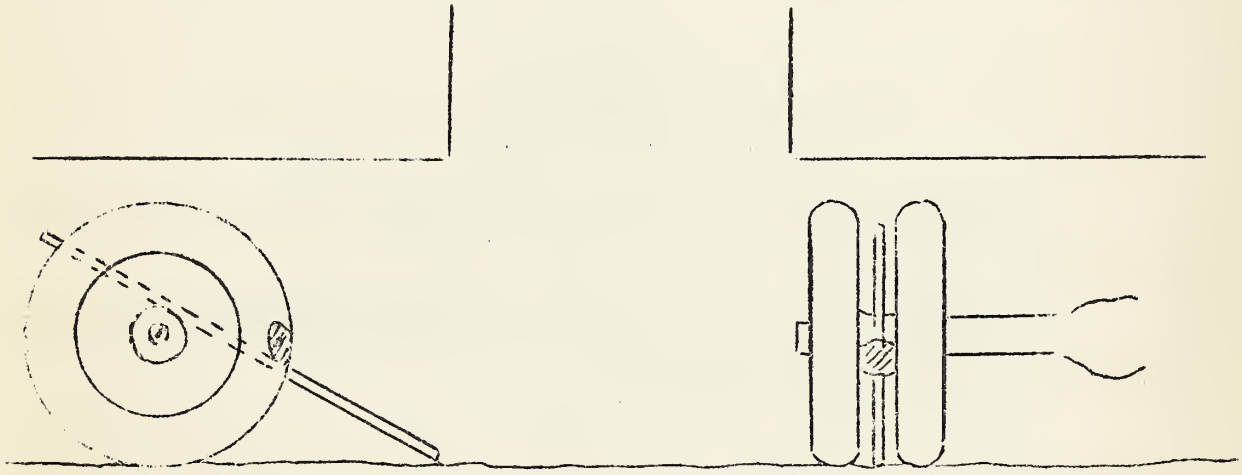
# CONSTRUCTION



# HINTS

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE

Vol. 2 Washington, D. C. February 8, 1936. No. 3



QUICK & EASY METHOD OF REMOVING ROCKS FROM DUAL WHEELS
Submitted by Morgan Camp S-52, Region 8, Hartburg, Tenn.

To quickly remove rocks that become wedged between the tires on the dual wheels of trucks lay a crow-bar between the tires, going under the rock to be removed and over the axle. Back the truck slowly, until the crow-bar rests on the ground, when a slight backing of the truck will then force the rock from between the tires by the lever action of the bar. Hammering rocks out from between the wheels often cuts the tires.

(Over)

## Protecting High Pressure Lines

Submitted by H. Coleman, Regional Engineer, Region 9.

Experience in other Regions during the past construction season has indicated that one source of breakage in high pressure lines on Gar Wood trailbuilders results from the practice among operators of screwing down the pressure release valve to a point where abnormally high pressures are developed in the hydraulic cylinder.

The proper working pressure is one just sufficient to hold the trailbuilder blade in the raised position. This can be secured by opening the pressure release valve until the hydraulic attachment will no longer hold the blade in the raised position and then screwing down the valve to a point where sufficient pressure is developed to just hold the raised blade; any increase in pressure beyond this point is unnecessary and should be avoided.

Where Gar Wood trailbuilders have been operated with proper working pressures breakage of high pressure lines has been largely eliminated, and in the future these units should be kept in proper adjustment and operators should be instructed accordingly.

## WIRE REEL

Submitted by C. V. Stevens, Inspector, R-1.

(See illustration on opposite page)

A suitable breast reel for winding up blasting lead wires can be constructed from a dynamite box and other odds and ends.

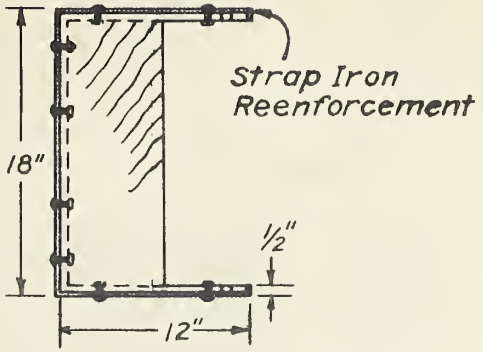
This reel enables the operator to reel up the wire and thus prevents injury from dragging the wire over rocks and also the possibility of damage from trucks and machinery.

Carrying straps should be made of leather, web or any flexible material in order to permit the carrying of the reel without discomfort or injury to the operator.

Holes through the crank for nailing would assist in making the spool more stable, although the nut will keep the crank tight within the spool.

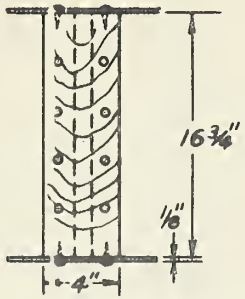
It is sometimes desirable to substitute a round piece of wood, say a short section of a small tree trunk, for the spool, instead of using two by fours.

BOX TOP VIEW



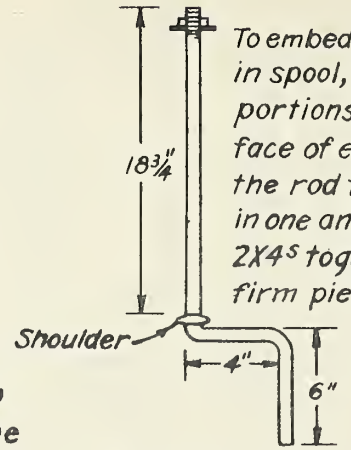

5/8" Bolts are countersunk in box. Retaining 3" Strap Iron Reenforcement.

SPOOL




Steel Plate Disks fastened to 2-2X4s with 2½" flat top screws countersunk in the Disks to prevent rubbing on box sides. Fasten Disks after Crank has been embeded between 2X4s.

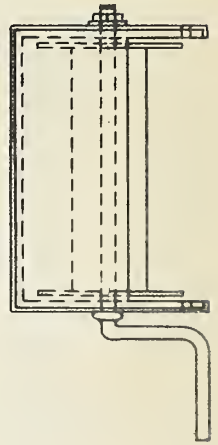
CRANK

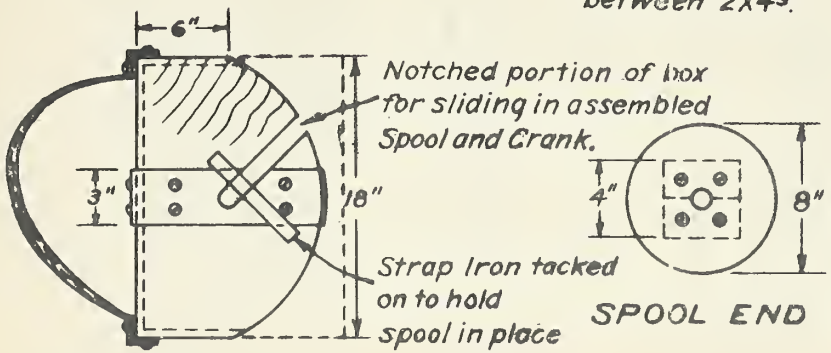



To embed Crank firmly in spool, cut away ½" portions in center of face of each 2X4. Spike the rod firmly to groove in one and then spike the 2X4s together into one firm piece.

Bent from ½" Rod. Can thread on one end for retaining nut and washer. Leave shoulder on handle end for retention.

ASSEMBLY TOP VIEW

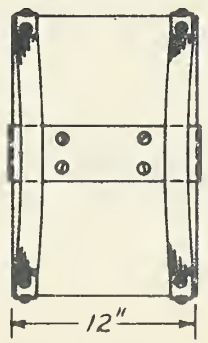





BOX SIDE VIEW

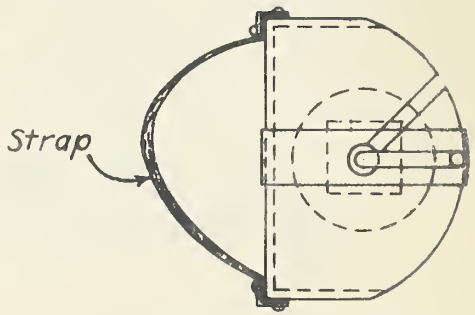
Showing portion of Dynamite box which has been cut away.

SPOOL END




BACK VIEW

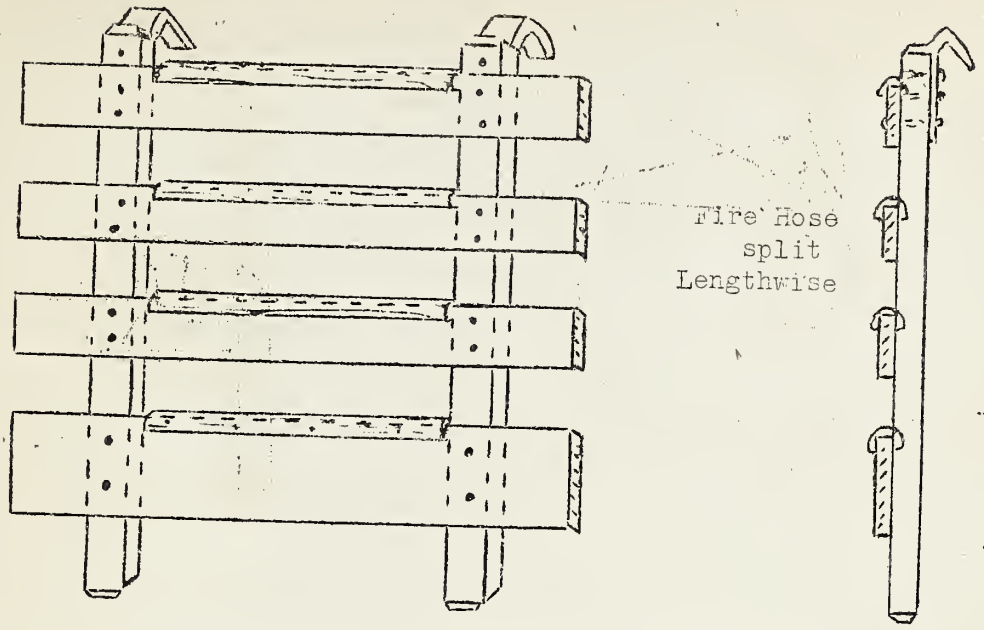
Showing 2" Carrying Straps hinged to strips fastened on the box with wood screws.




ASSEMBLY SIDE VIEW

# WIRE REEL

TAILGATE LADDER FOR STAKE BODY TRUCKS
Submitted by C. V. Stevens, Inspector, Region 1
Strap Iron Hooks




When tailgate is in its normal place the hooks are on the outside.

"It is generally the practice to use the tailgate as a ladder in order to enable the men riding in trucks to get on or off with safety.

"Safety treads may be placed on the gate slats by using a piece of fire hose split lengthwise and nailed on the top of each cross slat."

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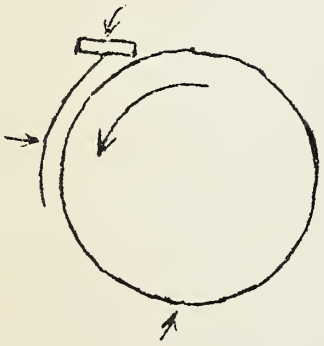
Mr. A. H. Crosby, Superintendent, Calcite F-17, Region 2, writes:

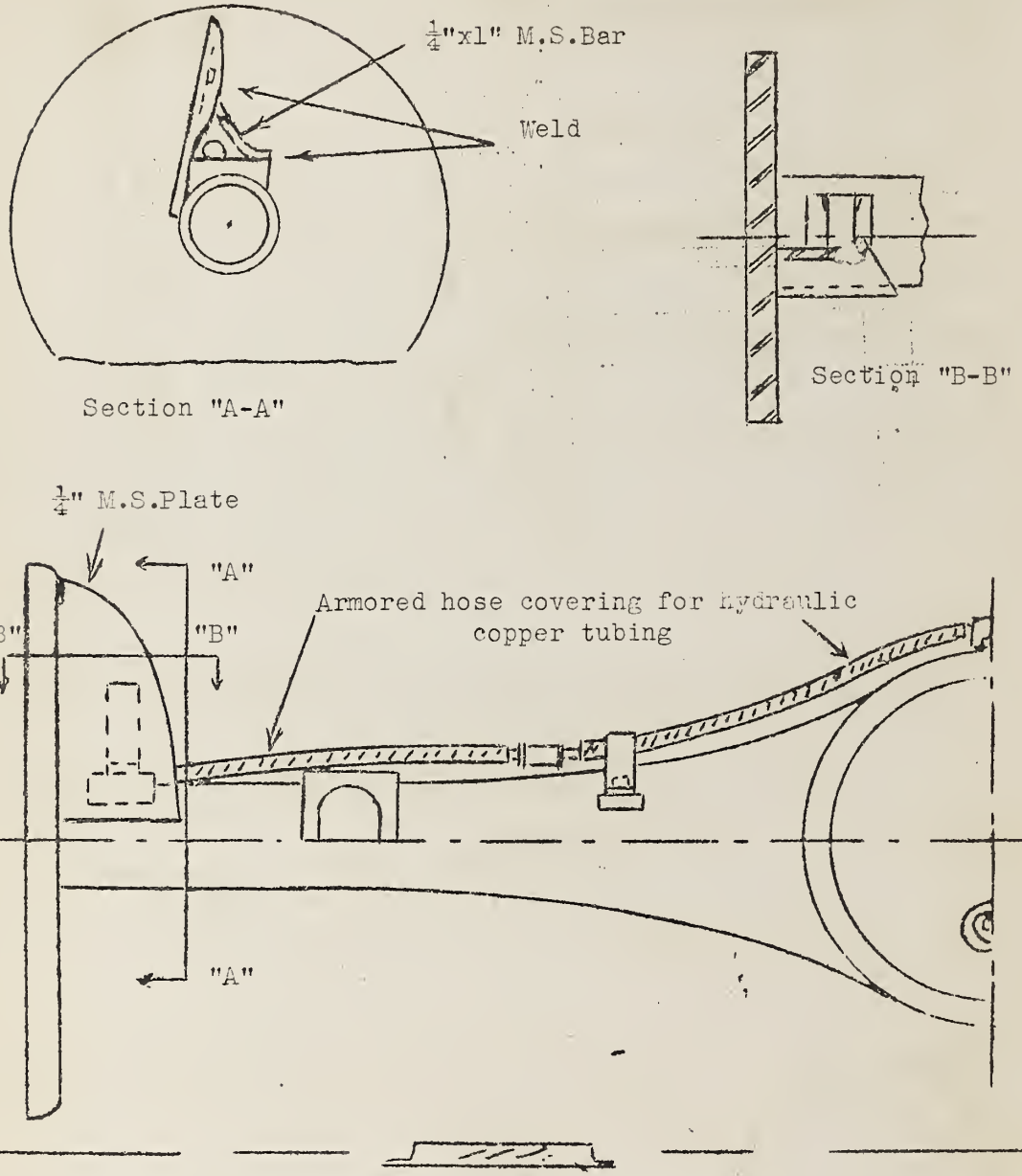


One of the enrollees from Missouri was showing me a new way (to me at least) of truing grindstones and I am passing it on for what it is worth.

He sits in the seat in usual position and holds an old carborundum stone cross-ways of the grindstone while turning toward him. Carborundum stone meanwhile is being held fairly rigidly on top of the grindstone splash guard. Considerable work is involved in truing stones that are badly cupped but once in shape they are kept that way readily.

Skid Chain Shield and Armored Hose for Protection of Hydraulic Lines.

Submitted by L. Roberts, Mt. Hood National Forest, Region 6.




The following is taken from WIRE ROPE advertisement in December 1935 issue of "Construction Methods".

A heavy sheave starts too slowly and when running builds up an unnecessary amount of momentum. When light loads give inadequate traction, the sheave frequently slips with starting and stopping and acts as a grinding wheel on the outer strands of the rope. This naturally causes undue wear and wire breakage. A correct balance between the applied rope load and the weight of the sheave should be obtained.